

REPORT UPON SOME WATER BUGS FROM MEXICO
COLLECTED BY MR. MELDON EMBURY

BY H. B. HUNGERFORD

A small collection of Aquatic and Semiaquatic Hemiptera was made for me during the summer of 1937 by Mr. Meldon Embury. Since the material contains some new species and some interesting distributional records, I record them here.

CORIXIDÆ

ARCTOCORIXA BEAMERI Hungerford. 10 ♂♂ and 17 ♀♀.

"Mexico, June 5, 1937. Juan Manual, near El Salto, 9300 feet above sea level. Pine forest region." This species was described from five specimens taken in Cochise Co., Arizona, in 1927, and the above Mexican series is the first encountered since the species was described.

NEOCORIXA SNOWI Hungerford. 9 ♂♂ and 4 ♀♀

"Mexico, June 10, 1937. San Antonio, near El Salto, 5000 feet above sea level, semitropical." 1 ♂ from "Juan Manual near El Salto, 9300 ft. above sea level. Pine forest region."

GRAPTOCORIXA BIMACULATA (Guér.) 13 ♂♂ and 18 ♀♀

"Mexico, August 20, 1937. Oaxaca, 5000 feet above sea level. Semidesert, irrigated land, semitropical."

Graptocorixa emburyi Hungerford, n. sp.

Length 6.3 mm.; width across eyes 1.95 mm. (male), 2.04 mm. (female).

General color dark with pattern typical for the genus. Pale lines on base of clavus more or less reddish and broader than the dark ones, elsewhere on the hemelytra the dark bands are as broad or a little broader than the pale ones and undulate. Pronotum crossed by nine or ten dark bands, no wider than the pale interspaces; the anterior four entire, others may be somewhat split. Basal half of embolium reddish; a sooty blotch on suture of embolium, behind which the margin is checkered. Venter brown to black. Head and eyes yellowish, only the base of the middle tibia and distal end of middle tarsus embrowned.

The so-called beak reduced. Frontal depression of male shallow and somewhat pilose; female with the same facial area pilose. Lower margin of basal half of front femur in both sexes provided with about four, long stout bristles. Inner base of male femur with small stridular patch. Front tarsus long, slender, tapering to a single stout claw in both sexes. The male pala provided with about 36 pegs arranged as shown in the drawing. Strigil of male of moderate size, flat, and composed of six longitudinal striæ. Genital capsule of male as shown at Figure 7.

Holotype male. Allotype and eight paratypes, all females, labeled "Mexico, June 10, 1937, Meldon Embury, San Antonio, near El Salto, 5000 ft. above sea level, semitropical," are in the Francis Huntington Snow Entomological Museum, University of Kansas.

This species is a trifle smaller than *Graptocorixa serrulata* (Uhler). It differs from Uhler's species in the more slender pala, reduced beak, sharper metaxpyhus, shape of strigil, and in lacking the curious projections on the dorsum of the male abdomen characteristic of *G. serrulata* Uhler, as well as the differences in the shape of the male claspers. The palæ of Uhler's species are usually strongly marked with black while none of the specimens of this new species is so marked.

NOTONECTIDÆ

NOTONECTA IMPRESSA Fieber. 1 ♀

"Mexico, August 6, 1937, Pachuca, State of Hidalgo, 8000 ft."

NOTONECTA MEXICANA A. & S. 1 ♂ and 3 ♀ ♀

"Mexico, August 20, 1937, Oaxaca, 5000 ft. semidesert irrigated land, semitropical."

Notonecta penelobata Hungerford, n. sp.

Male holotype 14 mm. long; width of pronotum 5 mm. The female allotype measures 13 mm. long. Appears to be slightly more slender than *N. lobata* Hungerford.

Male nearly black, female with the hemelytra tan with darker maculations. Legs with the black longitudinal stripe characteristic of the subgenus *Erythronecta*. It is probable that the color

range of the species is from greenish tan through red to black, as in other species of the group.

Head moderately large, anterior outline as viewed from above flattened; vertex slightly produced beyond anterior line of the eyes; vertex slightly longer than its anterior width in male, anterior margin of vertex less convex and plainly shorter than the frontal margin of the eye; anterior breadth of vertex : synthleipsis :: 20:6. Pronotum about one and one-half times the length of the head, lateral margins divergent, straight in male and nearly so in female; anterior angles normal; lateral ledge as seen from the side sinuate, oblique and shorter than the rear margin of the eye below it; anterior half moderately explanate. Anterior lobe of membrane larger than the posterior. Anterior trochanter of male with short hook. Mesotrochanter rounded. Keel of fourth abdominal sternite bare. Last abdominal sternite of female slender, the lateral margins reflexed and constricted beyond the middle, the tip deeply incised. Last abdominal sternite of male unusually broad; male genital capsule with a large, pyramidal projection in front of clasper.

Type in the Francis Huntington Snow Entomological Museum of the University of Kansas. Described from the holotype and one female allotype, labeled "Mexico, June 10, 1937, Meldon Embury, San Antonio, near El Salto, 5000 ft. above sea level, semitropical."

This species belongs to the subgenus *Erythronecta*. In my key, pages 65-66 of *The Genus Notonecta of the World*, it would run to *Notonecta lobata* Hungerford. The male is readily distinguished from *N. lobata* Hungerford by the shape of the genital capsule and the female by the shape of the last two abdominal sternites. See figures 3 and 5.

Notonecta penecompecta Hungerford, n. sp.

Females 13 mm. to 13.5 mm. long; width of pronotum 4.5 mm. to 4.95 mm. A little more slender than *N. compacta* Hungerford.

The females vary from tan and black to red and black and have the black longitudinal stripe on the legs characteristic of the subgenus *Erythronecta* to which this species belongs.

Head moderately large, anterior outline, as viewed from above, flattened; vertex slightly shorter than its width in these females; anterior breadth of vertex:synthleipsis::20:7. Pronotum shaped very much as in *N. compacta* Hungerford, somewhat less strongly constricted, the anterior marginal lobe a little longer. Meso-

trochanters not angulate. Penultimate abdominal sternite slender, inconspicuously notched at tip; last abdominal sternite as shown in drawing (fig. 4).

Holotype female and two paratype females in Francis Huntington Snow Entomological Collection at University of Kansas. These are labeled "Mexico, June 10, 1937, Meldon Embury, San Antonio, near El Salto, 5000 ft. above sea level. Semitropical."

These three females bear same label as the male and female of *Notonecta penelobata* Hungerford, but represent an undescribed species that is closely related to *N. compacta* Hungerford, from which it differs both in the shape of the pronotum and in the last abdominal sternites. *N. compacta* has a shorter and broader last abdominal sternite as can be seen by comparing the drawing on page 74 of "Notonecta of the World" with the illustrations furnished herewith. The shape of the pronotum is intermediate between *N. compacta* Hungerford and *N. mexicana* A. & S. while the last two abdominal sternites are distinctive.

While two species of females bear the same label as the male of *N. penelobata* Hungerford, I have no doubt that the female with the nearly straight lateral pronotal margins belongs to *N. penelobata* Hungerford since that species is obviously related to *N. lobata* Hungerford. In the subgenus *Erythronecta* the females are as specifically distinct as the males.

NOTONECTA REPANDA Hungerford. 6 specimens.

"Mexico, May 30, 1937, Durango City, 5000 ft. desert. Irrigated land."

NOTONECTA MELAENA Kirkaldy. 1 ♀

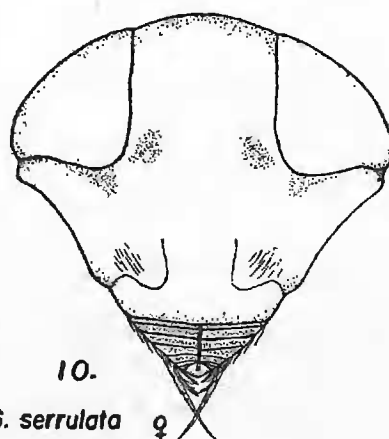
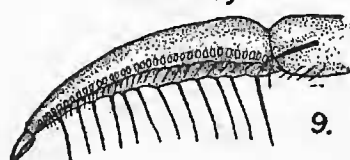
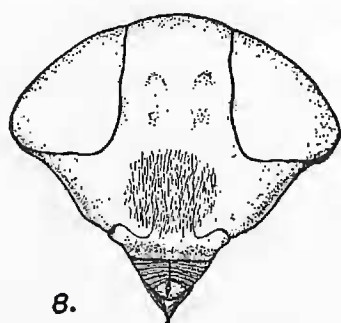
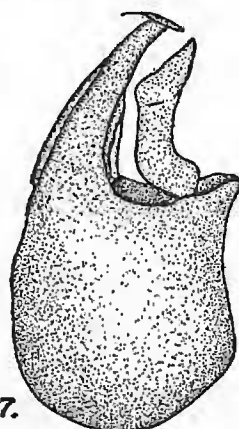
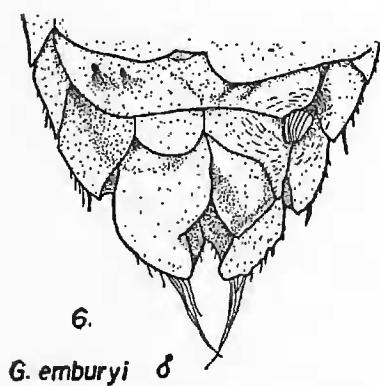
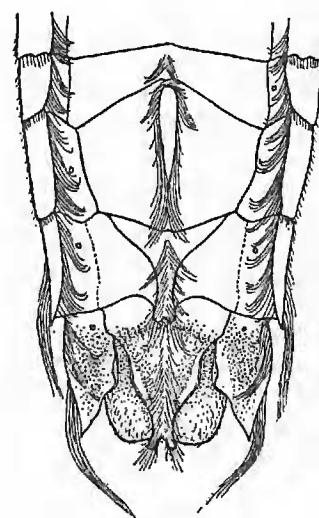
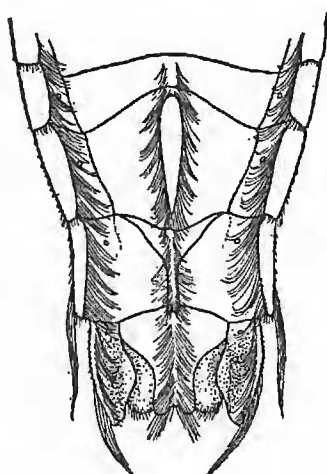
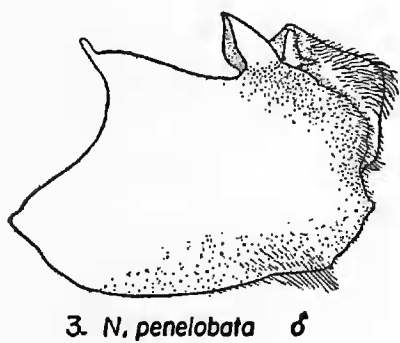
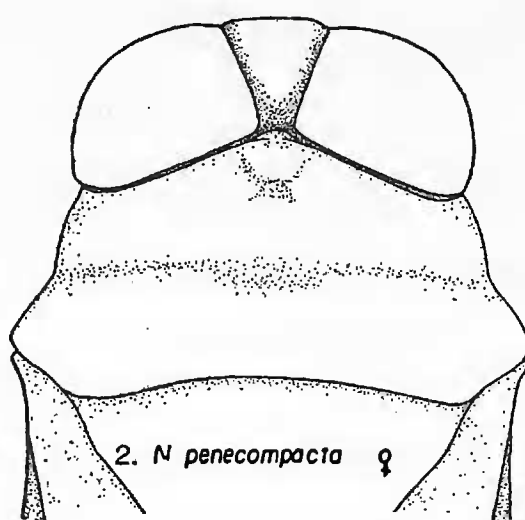
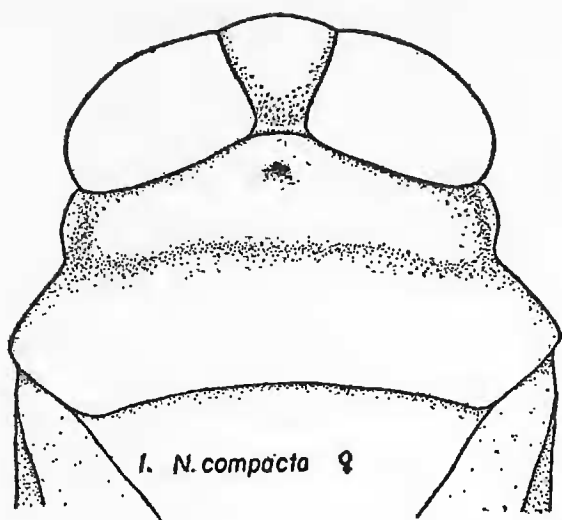
"Mexico, August 20, 1937, Oaxaca, State of Oaxaca, 5000 ft., semidesert, irrigated land. Semitropical."

NOTONECTA INDICOIDEA Hungerford. 3 ♂, 5 ♀

"Mexico, May 30, 1937, Durango, State of Durango, 5000 ft. desert, irrigated lands."

NOTONECTA DISTINCTOIDEA Hungerford. Six specimens

"Mexico, June 5, 1937, Juan Manual, near El Salto, 9300 ft. above sea level." These run to this species.



1. *N. compacta* Hungerford. Head and pronotum of female; 2. *N. penecompecta* n. sp. Head and pronotum of female; 3. *N. penelobata* n. sp. Male genital capsule; 4. *N. penecompecta* n. sp. Abdominal venter of female; 5. *N. penelobata* n. sp. Abdominal venter of female; 6. *G. emburyi* n. sp. Dorsum of abdomen of male; 7. *G. emburyi* n. sp. Male genital capsule; 8. *G. emburyi* n. sp. Face of female, 9. *G. emburyi* n. sp. Inside view of male pala; 10. *G. serrulata* (Uhler). Face of female.

A NEW HYDROMETRA FROM NEW CALEDONIA AND AUSTRALIA¹

BY H. B. HUNGERFORD

Hydrometra risbeci Hungerford, n. sp.

Length, 8.5 mm. to 11.1 mm.; females longer than the males. General color varying from yellowish brown to brown. Pronotum bearing a median longitudinal silvery stripe that may be continued forward on the post-ocular part of head; a curved silvery band above the anterior acetabula, and a submarginal longitudinal brown band on metathorax and abdomen. Venter of head, thorax and abdomen frosted. In winged forms the hemelytra are brown with a median longitudinal silvery stripe. In wingless forms the abdominal tergites are shiny reddish brown in males and at least medianly so in females, except the last tergite which is pubescent laterally in males and entirely pubescent in females.

Head: Length 80 units (holotype), 86 units (allotype). The ratio of the anteocular part of the head to the post-ocular part is given by the formula, AO:PO::49:25 (holotype), 54:25 (allotype). Dorsal interocular groove short, less than the diameter of an eye; ventral interocular groove not longer than the eye; clypeus connate; rostrum long almost reaching the anterior margin of pronotum; beginning with the basal the lengths of the segments of the antennæ are in the following ratio: 15:30:60:32 (holotype), 15:30:60:37 (allotype).

Pronotum: Length 45 units (holotype), 50 units (allotype). An encircling row of pits parallel to the anterior margin and about two units from it; posterior lobe with a median row of pits, a few pits near posterior end and about four antemarginal pits behind acetabula of first pair of legs.

Wings: Hemelytra of holotype fully developed, exposing the end of last abdominal tergite. Hemelytra of allotype minute.

Coxæ: The distance between the first and second coxæ is to that between the second and third coxæ as 30:42 (holotype);

¹ Contribution from Department of Entomology, University of Kansas, Lawrence, Kansas.